BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 11-2TH-1H, VOLUME 2

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Flying Operations

TH-1H HELICOPTER AIRCREW EVALUATION CRITERIA

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 11-2, *Aircrew Operations*, AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, and AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program.* It establishes the minimum Air Force standards for evaluating all aircrews performing duties in the TH-1H aircraft. This instruction applies to all major commands (MAJCOM) where active duty, Department of the AF Civilian (DAF) and contract personnel fly the TH-1H. It does not apply to the Air National Guard, or Air Force Reserve Command. File a copy of all approved waivers with this instruction.

MAJCOMs will coordinate MAJCOM-level supplements to this volume through AETC/A3V prior to publication. Field units below MAJCOM level will coordinate their supplements with their parent MAJCOM office of primary responsibility (OPR) before publication. Submit suggested improvements to this instruction on AF Form 847, *Recommendation for Change of Publication*, to the parent MAJCOM through standardization/evaluation (Stan/Eval) channels, who will forward approved recommendations to AETC/A3V.

Waiver requests shall be submitted in accordance with **paragraph 1.1**.

The Privacy Act of 1974 applies to certain information gathered pursuant to this instruction. Privacy Act System of Records Notice F011 AF XO A, Aviation Resource Management System (ARMS), applies. The authorities to collect and maintain the records prescribed in this publication are Title 37 United States Code, Section 301a, *Incentive Pay*, Public Law 92-204, Section 715, *Appropriations Act for 1973*, Public Law 93-570, *Appropriations Act for 1974*, Public Law 93-294, *Aviation Career Incentive Act of 1974*, DoDI 7730.57, *Aviation Career*

Incentive Act and Required Annual Report, Executive Order 9397, *Numbering System for Federal Accounts Relating to Individual Persons*, November 22, 1943, as amended by Executive Order 13478, and Executive Order 9397, *Relating to Federal Agency Use of Social Security Numbers*, as amended, November 18, 2008.

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SUMMARY OF CHANGES

This is a new document and must be completely reviewed. Starting with the current AFI 11-2UH/TH-1H Volume 2, all references to the UH-1H are deleted. Additionally this guidance is modified to incorporate evaluating enlisted aircrew members (abbreviated as FE throughout document).

Chapter 1

GENERAL INFORMATION

1.1. Approval and Waiver Authorities. The approval authority for changes or revisions to this instruction is AF/A3/5. The MAJCOM/A3 is the waiver authority for this instruction unless specified elsewhere. Submit waiver requests in memorandum format.

1.2. Conducting Evaluations. Conduct all evaluations according to the provisions of AFI 11-202, Volume 2, and this instruction. (T-2)

1.3. Evaluation Criteria Source. Attachment 2 provides TH-1H crewmember evaluation criteria for instrument, qualification, mission (MSN), and instructor evaluations.

1.4. Evaluation Conduct:

1.4.1. Flight examiners will use the evaluation criteria contained in this volume to conduct all flight and emergency procedures evaluations (EPE). (T-1). To ensure standard and objective evaluations, flight examiners must be thoroughly familiar with the prescribed evaluation criteria.

1.4.2. Unless specified, the examinee or flight examiner may fly in any seat (within their crew qualification) that best enables the flight examiner to conduct a thorough evaluation.

1.4.3. Prior to flight, the flight examiner will brief the examinee on the purpose of the evaluation and how it will be conducted and, if applicable, inform the aircraft commander of special requirements. The examinee will accomplish appropriate flight planning and mission preparation and furnish the flight examiner with copies of mission materials to include necessary maps (only one map per aircraft is required), flight logs, etc. (T-2).

1.4.4. Units will use AF Form 4104, TH-1H *Flight Evaluation Worksheet*, when administering flight evaluations and EPEs. (T-2)

1.4.5. When it is impossible to evaluate a required area in flight (due to equipment malfunctions, operational requirements, scheduling restrictions, or weather), the flight examiner may elect to evaluate the areas by an alternate method (verbal, procedural trainer). In the 'additional comments' section of the Form 8 under 'Examiner Remarks,' document why required areas were not evaluated in flight and the alternate method of evaluation used. If, in the flight examiner's judgment, a required item cannot be adequately evaluated by an alternate method, complete the evaluation on an additional flight. (AF Form 8 is prescribed in AFI 11-202, Volume 2. Refer to that publication for guidance on filling out the form.)

1.4.6. For initial evaluations, all required items must be performed by actual demonstration. Additionally, to evaluate a specific mission area, all subareas on AF Form 4104 must be evaluated unless designated as optional. (T-2).

1.4.7. All simulated emergency procedure maneuvers will be accomplished according to the guidance in TO 1H-1(T)H-1, *Flight Manual, USAF Series TH-1H Helicopter*; AFI 11-2TH-1H, Volume 3, TH-1H *Helicopter Operations Procedures;* and AFTTP 3-3.H-1, *Combat Aircraft Fundamentals, H-1*. (T-2)

1.4.8. The flight examiner will thoroughly debrief all aspects of the evaluation. During the debrief, the flight examiner will review the overall rating, specific deviations, area grades assigned, and required additional training (if applicable). (T-2).

1.4.9. Instrument evaluations may be completely administered in the Weapon Systems Trainer (WST). No evaluation profiles will be initiated in the WST, evaluations incomplete in the aircraft may be completed in the WST with 23 FTS/CC approval. Sound, visuals, and secondary motion are required for all evaluation profiles. Primary motion is not required, but highly recommended. ***NOTE:*** Secondary motion systems provide additional cues including rotor vibrations, translational lift vibrations, and aircraft harmonics.

1.4.9.1. The following maneuver items will not be evaluated in the WST under any conditions: precision hover, taxiing, slope operations, autorotations to a touchdown, and EMER GOV OPNS in a hover. Evaluators always have discretion to consider the impact of device fidelity upon examinee performance. If the evaluator considers the examinees performance to be detrimentally affected by the device fidelity, the evaluator must cease evaluation in the simulator (maneuvers already accomplished will be graded; ungraded maneuvers will be accomplished IAW **paragraph 1.4.5**).

1.4.9.2. Formation items may be evaluated using lead-ship record function or networking.

1.4.9.3. Evaluators must be Instructor Operating System (IOS) certified to conduct a checkride in the simulator and may conduct checkrides from any IOS station in the WST.

1.5. Spot Evaluations of Other Aircrew Specialties. Any operations group Stan/Eval or higher headquarters flight examiner, regardless of aircrew specialty, may administer aircrew spot evaluations. However, if the examiner is administering a spot evaluation to a person in another aircrew specialty, the examiner may only evaluate boldface, safety, judgment, situational awareness, and ability to instruct (if applicable).

1.6. Aircrew Publications. Examiners will check aircrew publications during all qualification evaluations to ensure they are current and properly posted. (T-2). Each aircrew member is responsible for maintaining the publications in Table 1.1. Electronic publications will be maintained IAW AFI 11-215, *USAF Flight Manuals Program*, AETC Supplement. The operations group commander may direct additional publications be maintained or required in flight.

Table 1.1. Required Aircrew Publications (T-3).

Publication	Pilot	Flight Engineer (FE)	Required In Flight
TO 1H-1(T)H-1 (note 1)			
TO 1H-1(T)H-1CL-1	**X**	**X**	**X**
TO 1H-1(T)H-5 *Basic Weight Checklist and Loading Data* (note 1)			**X**
AFI 11-2TH-1H, Volume 3 (note 1)			
AFI 11-2TH-1H, Volume 3, checklist	**X**	**X**	**X**
AFI 11-202, Volume 3, *General Flight Rules* (note 1)			

Notes: 1-One copy required per aircraft

1.7. Cockpit/Crew Resource Management (CRM). CRM is the effective use of all available resources by individuals or crews to safely and efficiently accomplish an assigned mission or task. The term CRM refers to the training program, objectives, and key skills directed to this end. CRM will be evaluated on all flight evaluations. See AFI 11-290, *Cockpit/Crew Resource Management Program,* for guidance.

1.8. Evaluation Grading Instructions. Areas not applicable to the unit or mission should not be performed; however, all areas performed will be graded. (T-2).

1.8.1. **Deviations.** Flight examiners will base tolerances for in-flight parameters on conditions of smooth air and a stable aircraft. Do not consider a momentary deviation from tolerances provided the examinee applies prompt corrective action, and such deviations do not jeopardize flying safety. The flight examiner may consider cumulative deviations when determining the overall grade. (T-2).

1.8.2. **Standards and Grading Guide.** The standards and grading criteria contained in Attachment 2 are provided as a guide to assist the flight examiner in determining grades. These criteria are not necessarily provided as minimum or maximum parameters for each maneuver. Examiners should compare examinee performance for each grading area with the standards provided in this instruction and consider all other factors before assigning grades. The flight examiner derives the overall flight evaluation grade according to AFI 11-202, Volume 2, and this volume, and must:

1.8.2.1. Exercise judgment when wording of grading criteria is subjective and when specific situations are not covered. (T-2).

1.8.2.2. Use his or her judgment as the determining factor in assigning the overall grade. (T-2).

1.8.3. **Critical Areas and Subareas.** Critical areas and subareas are defined as those that can be graded only "**Q**" or "**U**" (e.g. BOLDFACE). Any unsatisfactory performance in a critical area or subarea will result in a qualification level of "**Q-3**". Critical areas and subareas are identified in **Attachment 2** with an asterisk (*). (T-2).

1.8.4. **Noncritical Areas and Subareas.** Noncritical areas and subareas are graded either "**Q**", "**Q-**", or "**U**". Unsatisfactory performance in a noncritical area or subarea will result in a qualification level of no higher than "**Q-2**". (T-2).

1.8.5. **Area and Subarea Grades.** The desired level of performance, "**Q**", is listed in **Attachment 2** for each area or subarea. Refer to the definitions for "**Q"**, "**Q-**", and "**U**" in AFI 11-202, Volume 2.

1.9. Aircrew Examination Procedures:

1.9.1. Computer-based training or electronic information management tools may satisfy the requirement for written examinations if the electronic format meets the requirements for examinations in AFI 11-202, Volume 2. Units may generate a unique test for each crewmember using appropriate computer software programs.

1.9.2. The number of test questions will be determined using AFI 11-202, Volume 2, as supplemented by the MAJCOM. (T-2). The following is the minimum number of questions to be used; this number may be raised by MAJCOM supplement:

1.9.2.1. **Qualification Open.** Fifty questions.

1.9.2.2. **Qualification Closed.** Twenty-five questions.

1.9.2.3. **Instrument Open.** Fifty questions.

1.9.2.4. **Mission Open.** Fifty questions.

Chapter 2

EVALUATION REQUIREMENTS

2.1. Evaluation Requisites:

2.1.1. Refer to AFI 11-202, Volume 2, for qualification and instrument evaluation requisites.

2.1.2. MSN evaluation requisites consist of an MSN open-book examination and EPE (evaluate MSN-specific emergency procedures and systems knowledge during MSN evaluations). **Note:** A MSN open-book examination is not required for an MSN evaluation that adds a qualification for a crewmember. However, if the MSN open-book examination is not completed, the evaluation will not update the 17-month cycle.

2.2. EPEs:

2.2.1. EPEs will not be conducted in flight (aircraft or WST). The purpose of the EPE is to evaluate systems knowledge and emergency procedures on the ground, allowing a more in-depth investigation of systems knowledge and scenario-driven circumstances. (T-2).

2.2.2. The EPE is a verbal evaluation and should be scenario driven with an emphasis on emergency procedures and systems knowledge. Flight examiners may use one continuous scenario throughout the EPE or different scenarios for each emergency procedure. (T-2).

2.2.3. Examinees may use publications that are normally available in flight. The examinee must recall applicable boldface items from memory. (T-2).

2.2.4. The flight examiner may present situational emergency procedures in flight (use of the WST is encouraged); however, they will NOT be graded as an EPE. Instead, situational emergency procedures presented in flight will be graded under the Knowledge of Publications, Systems, and Limits section of AF Form 4104. The WST offers an excellent platform to evaluate situational emergency procedures; however, Flight Evaluation Criteria are the same for the WST as they are for the aircraft.

2.2.5. Boldface procedures may be associated with situational EPEs. If not, knowledge of boldface procedures will be demonstrated to the flight examiner either verbally or in writing. All boldface emergencies must be covered for qualification evaluations. (T-2).

2.2.6. The flight examiner will assign an overall grade to the EPE (1, 2, or 3) in the qualification ground phase of the AF Form 8. (T-2).

2.3. Qualification Evaluations. Complete all required subareas on AF Form 4104 under Areas I and II for the crewmember's aircrew specialty. If the crewmember is an instructor, complete Area IV. Subareas labeled ***optional*** do not have to be accomplished in flight but as a minimum will be evaluated verbally. (T-2).

2.4. Instrument Evaluations. Complete all required subareas on AF Form 4104 from Areas I and III. If the crewmember is an instructor, complete Area IV. Subareas labeled ***optional*** not accomplished in flight will be evaluated verbally. (T-2).

2.5. Mission (MSN) Evaluations. Complete all required areas and subareas for initial mission (INIT MSN) and requalification mission (RQ MSN) evaluations. Aircrew must be trained and initially evaluated on remotes, low-level, and formation night vision goggles (NVG) to be night-

mission qualified. All night-mission maneuvers will be accomplished using NVGs for initial and requalification evaluations. (T-2). **Note:** In certain cases, civilian contract instructors may be qualified in some, but not all, MSN events. In this case, the INIT MSN evaluation will only include those areas in which the instructor received training, and the AF Form 8 will clearly state in which areas the instructor has been evaluated and is qualified to instruct. For recurrent MSN evaluations, complete all of Area I, AF Form 4104, and a representative sample of mission subareas from Area V. If the crewmember is an instructor, complete Area IV. Evaluators are encouraged to give the crewmember a scenario representative of a unit mission. Not every unit mission needs to be evaluated in flight, and unit missions can be conducted day or night for recurrent MSN evaluations. An attempt should be made to alternate day and night mission profiles on periodic MSN evaluations.

2.6. Certifications. Certifications do not require evaluations. Document certifications on an AF Form 4348, *USAF Aircrew Certifications*, with the squadron commander's signature. AF Form 4348 is prescribed in AFI 11-202, Volume 2. Refer to that publication for guidance on filling out the forms.

2.7. Instructor Evaluations. To initially qualify as an instructor in the TH-1H, the crewmember must successfully complete an initial instructor evaluation. The evaluation must include a representative sampling from Areas I, II, III, IV, and V of the AF Form 4104. **Exception:** If the crewmember transferred current MSN qualifications from another H-1 series aircraft, the evaluation must include all required subareas from Areas I, II, and IV but only the portions of Area V where a current MSN qualification did not already exist. **Note*:*** Evaluator status is a certification versus a qualification. Certified evaluators will be given recurring evaluations acting in the instructor crew position. (T-2).

2.7.1. Evaluate Area IV during all periodic evaluations for instructors. (T-2).

2.7.2. Thoroughly evaluate the examinee’s instructor knowledge and ability as outlined in Attachment 2.

Chapter 3

EVALUATION CRITERIA

3.1. Ground Phase Requisites (P/FE). Ground phase requisites requirements vary depending upon the specific evaluation administered according to AFI 11-202, Volume 2, and may include a combination of applicable examinations, boldface, and an EPE. Grading criteria for ground phase requisites are conducted according to AFI 11-202, Volume 2, or as defined in this attachment.

3.2. EPE. (P/FE) EPEs are graded by qualification levels as follows:

3.2.1. (1) Given a simulated emergency, correctly analyzed the situation and provided the appropriate action. (Boldface, if required, was provided promptly with correct response in the correct sequence.) Used the checklist or flight manual, as required. Demonstrated a thorough understanding of aircraft systems, limitations, and performance characteristics.
3.2.2. (2) Made minor deviations from (1) criteria. Did not compromise safety, aircraft limitations, or maneuver or mission effectiveness. Analysis was slow or incomplete. Had some deficiencies in systems knowledge. Referred to the checklist or flight manual, as required.
3.2.3. (3) Made major deviations from (1) criteria. Made incorrect analysis or incorrect response to boldface. If required, boldface was provided with significant hesitation or with incorrect response or sequence. Had significant deficiencies in systems knowledge. Did not refer to the checklist or flight manual, as required.

3.3. Evaluation Criteria. Table 3.1 provides the grading criteria for determining individual area grades (see paragraph 1.4.3). Use all criteria applicable to the events performed on the evaluation. (T-2).

3.1.1. Table 3.1 divides grading areas into subareas where applicable. FEs will assign grades to each subarea where the table provides evaluation criteria and the examinee performs the maneuver. FE's will annotate discrepancies on the AF Form 8 by area or subarea.

3.1.2. Asterisked (*) items identify critical sub areas.

Table 3.1. Grading Criteria.

ITEM	A	B	C	D
	Area	Grading Criteria		
		Q	Q-	U
Section I: General				
1	**Knowledge of Publications, Systems, and Limits: (P/FE)**	Demonstrated a thorough knowledge of National Airspace System rules and procedures, applicable aircraft, equipment, publications, and systems operating	Made minor errors or omissions from **(Q)** criteria. Deviations did not involve any safety of flight issues in regard to National Airspace System rules and procedures,	Unfamiliar with National Airspace System rules, procedures, and other applicable aircraft, equipment, publications, and system operating

		limits. Ensured satisfactory operation within limits.	applicable aircraft, equipment, publications, and systems operating limits.	limits and procedures.
2	**Performance Data/Weight and Balance: (P/FE)**	Checked all factors applicable to the flight. Verified accuracy of performance data and weight and balance information to ensure operation within specified parameters. Correctly computed takeoff and landing data (TOLD) and (or) weight and balance according to the flight manual and the student guide. Determined the fuel required ±50 pounds and endurance ±10 minutes (based on the expected fuel at takeoff) and the average cruise airspeed planned. Computed the TOLD within the following specified tolerances: weight ±100 pounds, power available ±1 percent, power required ±2 percent, and velocity never to exceed (Vne) ±2 knots.	Made minor errors or omissions from **(Q)** criteria. Computations were within the following specified tolerances: weight ±200 pounds, power available ±2 percent, power required ±3 percent, and Vne ±3 knots.	Made gross errors and (or) omissions from **(Q)** criteria that would prevent safe and effective mission accomplishment. Computations were not within **(Q-)** tolerances.
3	**Preflight and Postflight: (P/FE)**	Accomplished required aircraft or equipment inspections according to the flight manual and applicable directives. Ensured	Made minor deviations from **(Q)** criteria. Did not compromise safety or mission effectiveness. Lacked acceptable	Failed to complete preflight and (or) postflight checklists or did so in an unsafe manner.

		the aircraft was correctly configured for assigned mission and was fully aware of aircraft readiness for flight. Appropriate checklists and (or) technical orders (T.O.) were out and available for reference. Ensured all required personal and mission equipment was available. Equipment was properly preflighted, operated, and secured. Had a thorough understanding of the information contained in aircraft and equipment forms and correctly determined aircraft or equipment status. Completed all required forms (before, during, and after flight, to include training folders, as applicable) without significant errors.	familiarity with preflight and (or) postflight procedures.	
4	**Cargo and Passenger Loading, Offloading, and Tiedown: (P/FE)**	Satisfactorily loaded or offloaded the aircraft and secured all cargo and equipment according to the flight manual and other applicable directives.	Made minor deviations from **(Q)** criteria. Did not compromise safety or mission effectiveness. Did not satisfactorily load or offload the aircraft and (or) secure all cargo and equipment according to the flight manual and other applicable directives. IP intervention was required to secure	Unsafely loaded or offloaded the aircraft and (or) unsafely secured cargo and equipment not according to the flight manual and (or) other applicable directives.

			cargo and equipment.	
5	**Startup and Shutdown Procedures: (P/FE)**	Accomplished startup and shutdown procedures, including all required checks according to the flight manual, checklists, and applicable directives. Correctly configured the cockpit and coordinated with ground support personnel. Familiar with required responses to abnormal or emergency situations.	Minor deviations from **(Q)** criteria. Did not compromise safety or mission effectiveness. Lacked acceptable familiarity with startup procedures.	Unsafely attempted startup and shutdown procedures. Incorrectly configured the cockpit and (or) failed to coordinate with ground support personnel. Unfamiliar with required responses to abnormal or emergency situations.
6	**Use of Checklists: (P/FE)**	**(Q)** Effectively referenced and completed appropriate checklists with accurate and timely responses. Was familiar with checklists and contents. Demonstrated a thorough knowledge of checklist notes, cautions, and warnings without reference to the flight manual. Before-takeoff and (or) before-landing checklists adequately covered aircrew intentions in the event of an abort, aircraft problem, etc. Without prompting from the instructor or evaluator, initiated level off, after-landing, before-	Minor deviations from **(Q)** criteria. Did not compromise safety of mission effectiveness. Slow to respond and (or) had difficulty executing proper procedures and had poor checklist discipline. Before-takeoff and (or) before-landing checklists did not adequately cover aircrew intentions in the event of an abort, aircraft problem, etc.	Did not use or complete checklists. Lacked acceptable familiarity with contents.

		takeoff, before-takeoff (multiple takeoffs), before-landing, and hot-refueling checklists, as appropriate, in flight.		
***7**	**Safety: (P/FE) (Critical)**	Recognized factors affecting safety of flight. Assessed available options and selected a suitable course of action based on reasonable risk assessment. Was aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.		Not aware of or did not comply with all safety factors required for safe operation of aircraft or mission accomplishment. Did not adequately clear the aircraft. Operated aircraft in a dangerous manner. Unnecessarily subjected crew or aircraft to increased risk. Compromised safety and allowed a dangerous situation to develop.
***8**	**Flight Discipline: (P/FE) (Critical)**	Assessed all aspects of the situation and took an appropriate course of action consistent with prudence, common sense, integrity, mission priority, and safe and effective mission accomplishment.		An untimely or inappropriate decision led to an inappropriate response to the situation, compromised integrity or safety, and (or) degraded effective mission accomplishment.
9	**Cockpit/Crew Resource Management (CRM): (P/FE)** ***a. Airmanship/ Situational Awareness (Critical):**	Aware of and responded to all factors that affected safety, crewmembers, aircraft, or mission effectiveness. Maintained continuous perception of self and aircraft in relation to the dynamic environment		An untimely or inappropriate decision led to an inappropriate response to the situation which compromised safety.

		of flight, threats, and mission. Demonstrated the ability to forecast and then execute tasks based on that perception. Demonstrated knowledge and skills to prevent the loss of situational awareness, recognized the loss of situational awareness, and when necessary, demonstrated techniques for recovering from the loss of situational awareness.		
	b. Crew Coordination and Flight Integrity:	Communicated and coordinated effectively with other crewmembers without misunderstanding, confusion, or delay. Considered the needs, responsibilities, abilities, and inputs of all crewmembers. Worked effectively with all members of the crew to accomplish the tasks of the mission. Utilized all the members of the flying package to accomplish the mission at hand. Had knowledge of and effectively exercised the attributes of leadership, responsibility, assertiveness, conflict resolution, hazardous	Slow to respond and (or) had difficulty executing proper procedures and had poor checklist discipline. Slow to respond to the needs, responsibilities, abilities, and inputs of all crewmembers. Did not work effectively with all members of the crew to accomplish the tasks of the mission.	An untimely or inappropriate decision led to an inappropriate response to the situation that compromised safety.

		attitudes, behavioral styles, legitimate avenues of dissent, and team building.		
	c. Communications/ ATC Procedures	Fully knowledgeable of communications procedures. Required contacts were made without hesitation, omission, or discrepancy. Promptly complied with all controlling agency's instructions and made required reports. When communicating with air traffic control (ATC) facilities, used correct radio communication procedures and phraseology per the Airman's Information Manual and DoD flight information publications (FLIP). Acknowledged each radio communication with ATC by using the correct call sign. Obtained proper clearance from the controlling agency. Shared information with others to cause some kind of action—direct, inform, question, or persuade. Had knowledge of common errors, cultural influences, and barriers (grade, age, experience, and position). Demonstrated effective listening,	Slow to comply with controlling agency instructions or unsure of reporting requirements. Did not compromise safety, aircraft limitations, or maneuver or mission effectiveness.	Unfamiliar with proper communications procedures. Required contacts were delayed, misleading, or incorrect. Failed to comply with controlling agency instructions and (or) accepted clearance with which they could not comply. Entered controlled airspace without the proper clearance.

		feedback, precision, and efficiency of communication with all members and agencies (crewmembers, wingmen, weather, ATC, intelligence, etc.).		
	d. Risk Management/ Decision Making	Accurately completed risk assessment and mitigation throughout the flight. Updated risk analysis throughout the mission and kept the crew informed of changes. Exercised a logic-based, commonsense approach to making calculated decisions on human, material, and environmental factors before, during, and after mission activities and operations. Demonstrated the ability to choose a course of action, using logical and sound judgment based on available information. Effectively incorporated risk assessment, the risk management process, tools, breakdowns in judgment and discipline, problem solving, evaluation of hazards, and control measures.	Minor deviations from (Q) criteria. Slow to recognize, assess, and mitigate risk throughout the flight.	Did not demonstrate the ability to choose a course of action and used poor logic and unsound judgment based on available information. Did not effectively incorporate risk assessment, the risk management process, tools, breakdowns in judgment and discipline, problem solving, evaluation of hazards, and (or) the necessary control measures to effectively mitigate risks associated with the mission.
	e. Task	Effectively	Slow to consider	Unfamiliar with task

	Management	demonstrated the ability to alter a course of action based on new information, maintain constructive behavior under pressure, and adapted to internal and external environment changes. Properly established priorities; avoided overload, underload and complacency; managed available resources, checklist discipline and standard operating procedures.	priorities, overload, underload, complacency, available resources, checklist discipline, and standard operating procedures. Did not compromise safety, aircraft limitations, maneuver effectiveness, or mission effectiveness.	management procedures, which compromised mission integrity and (or) flight safety.
	f. Mission Planning	Developed a sound and thorough plan to accomplish the mission. Accounted for all factors applicable to the flight (weather, notices to airmen [NOTAM], landing site data, FLIPs, weight and balance, performance data, fuel requirements, maps current and chummed, etc.) according to applicable directives. Completed DD Form 175-1, *Flight Weather Briefing*, and AF IMT 70, *Pilot's Flight Plan and Flight Log*, as applicable, without significant errors. (AF IMT 70 is prescribed in AFI 11-202, Volume 3. Refer to the publication for	Minor errors and (or) omissions from **(Q)** criteria. Minor errors while completing DD Form 175-1 and AF IMT 70, which did not compromise mission integrity and (or) flight safety.	Gross errors and (or) omissions from **(Q)** criteria. Significant errors while completing DD Form 175-1 and AF IMT 70, which compromised mission integrity and (or) flight safety.

		guidance on filling out the form.)		
	g. Briefings and Debriefings	Presented a logical, well organized, and professional briefing in a timely manner. Covered all factors pertaining to the flight and provided effective discussion for accomplishing the mission. Concluded the briefing in time to allow for a thorough preflight of personal equipment, aircraft, and mission equipment. Considered the abilities and limitations of all flight members. Effectively used training aids. Thoroughly and professionally briefed passengers. Thoroughly debriefed the mission, including mission accomplishment, deviations, and lessons learned. Offered correct guidance, as appropriate. Debriefed maintenance personnel as required. **Note:** If not the briefer or debriefer, actively participated and provided input when required. Fully understood the briefing and debriefing and	Events were out of sequence, redundant, or difficult to understand. Did not effectively use training aids. Focused on nonessential items or omitted minor details. Did not consider flight members' abilities. Managed time poorly. Passenger briefing lacked sufficient information. **Note:** If not the briefer or debriefer, did not fully understand duties, and a lack of action or input created minor problems but did not affect safe mission accomplishment.	Presentation was disorganized or in an illogical sequence. Created doubts or confusion or omitted major events. Did not allow sufficient time for preflight of personal equipment, aircraft, and (or) mission equipment. Ignored flight members' abilities, limitations, and (or) questions. Did not brief passengers. Did not debrief mission deviations or offer corrective guidance. Did not debrief maintenance personnel, as required. **Note:** If not the briefer or debriefer, was late or missed the briefing. Was not prepared or did not actively participate when requested. Did not fully understand duties, and a lack of action or input created problems that impacted safe mission accomplishment.

		followed instructions.		
10	**Fuel Management: (P/FE)**	Updated fuel status at each way point on the navigational route. Determined an updated fuel required and endurance in flight when required to divert, hold, or fuel consumption was more than 50 pounds per hour (pph) greater than predicted on the performance planning card. Understood and monitored continuation fuels and bingo fuels for each major way point and for the stage field during contact.	Minor errors and (or) omissions from **(Q)** criteria	Major deviations from **(Q)** criteria
11	**Scanning and Clearing: (P/FE)**	Provided clear, concise, and positive direction to the crew during all phases of flight. Ensured aircraft clearance from obstacles. Appropriately alerted crew to obstacles within 25 feet of aircraft.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Was unfamiliar with or did not comply with established procedures.
Section II: QUALIFICATION				
12	**Publications Check: (P/FE)**	Publications current and properly posted.	Publications current with minor or administrative errors in posting.	Publications not current and (or) with errors in posting that resulted in incorrect or incomplete information.
13	**Hover and Taxi Maneuvers: (P)**	Performed hover and taxi according to procedures outlined in the flight manual and AFTTP 3-3.H-1.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver

		Performed smooth, precise, and controlled aircraft movements. Maintained desired position and ground track ±2 feet, heading ±10 degrees. Taxied at constant speed and altitude of 4 feet (±1 foot). While turning, did not exceed 90 degrees in 4 seconds. Was familiar with marshaling signals.	effectiveness.	accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.
14	**Takeoffs: (P)**	Performed takeoffs according to procedures outlined in the flight manual and AFTTP 3-3.H-1. Performed smooth, precise, and controlled aircraft movements. Maintained constant ground track and climbout angle. Maintained takeoff heading ±10 degrees below 50 feet. Aircraft was in trim above 50 feet of simulated or real obstacle. Maintained constant airspeed after achieving 70 knots indicated airspeed (KIAS) ±10. Applied smooth power application and maintained takeoff power ±2 percent. If necessary, takeoff abort was executed in a safe and timely manner as briefed or	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Was unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.

		required without exceeding aircraft limitations. **a. Normal Takeoff.** Initiated from the ground or a 4 feet (±1 foot) hover. Applied hover power plus 10 percent and achieved approximately 70 KIAS prior to 100 feet above ground level (AGL), but greater than 15 feet by 60 KIAS (as depicted in the height-velocity diagram) or as briefed. **b. Marginal Power Takeoff.** Initiated at a 4 feet (±1 foot) hover or from the ground. Accelerated without ground contact. Applied no more than 4-foot hover power. Cleared a real or simulated 50-foot obstacle down range. Accomplished climbout above effective translational lift (ETL) without descending below 50 feet and (or) the obstacle while accelerating to 50 KIAS. **c. Maximum Performance Takeoff.** Initiated at a 4 feet (±1 foot) hover or from the ground. Applied desired power (usually 4-foot		

		hover power plus 10-15 percent) smoothly and positively. Cleared a real or simulated 100-foot obstacle. Accomplished climbout without descending below 100 feet and (or) the obstacle while accelerating to 70 KIAS.		
15	**Approaches (P)**	Performed the approach according to procedures outlined in the flight manual and AFTTP 3-3.H-1. Performed smooth, precise, and controlled aircraft movements. Maintained constant ground track, approach angle, and aircraft in trim above 50 feet (below 50 feet aligned aircraft with lane or desired landing direction). Descent and deceleration were constant and even. If necessary, a go-around was executed in a safe and timely manner as briefed or required without exceeding aircraft limitations. Terminated the approach within 5 feet of intended landing or hover spot. Arrived at or near zero groundspeed on	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.

		termination of the approach. **a. Normal Approach.** Entered at 300 feet AGL(or appropriate stagefield altitude) and 70 KIAS. Started the descent on an apparent approach angle of 30 degrees. Terminated to hover or touchdown at the desired landing point. **b. Steep Approach.** Entered at 300 feet AGL (or appropriate stagefield altitude) and 30 knots apparent groundspeed. Started descent on an apparent approach angle of 45 degrees. Terminated to touch down at the desired landing point. Achieved at or near zero groundspeed at intended hover or touchdown spot. **c. Shallow Approach.** Entered at 300 feet AGL (or appropriate stagefield altitude) and 70 KIAS. Started the descent on an apparent approach angle of 10 degrees. Terminated to hover or slide at the desired landing point. **d. Turning Approach (Optional).** Entered from any applicable		

		point in the traffic pattern. Executed a continually descending, decelerating turn to align the aircraft with the landing spot. Terminated to hover or touch down at the desired landing point.		
16	**Landings: (P)**	Performed landing according to procedures outlined in flight manual and AFTTP 3-3.H-1. Performed smooth, precise, and controlled aircraft movements. Maintained constant heading ±10 degrees. **a. To a Hover.** Terminated at 3 to 5 feet over the intended spot with no forward speed. **b. To a Touchdown.** Maintained a constant rate of descent to touchdown. Touched down with minimal forward speed over the intended spot. Touched down without excessive descent rate and with no side drift. **c. To a Slide.** Maintained above ETL until touchdown. Maintained alignment with the landing area. Level touchdown was accomplished at the	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.

		intended location with minimal rate of descent.		
17	**Traffic Pattern (P)**	Performed traffic pattern according to procedures outlined in the flight manual and other directives. Performed smooth, precise, and controlled aircraft movements. Maintained a rectangular pattern. Maintained 90 KIAS and 500 feet AGL on downwind and 70 KIAS and 300 feet AGL on base (or per local directives) with airspeed deviations <±10 KIAS and altitude deviations <±100 feet. Conducted a level turn to final on desired heading ±10 degrees. Maintained the aircraft in trim.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness. Airspeed deviations <±20 KIAS and altitude deviations <±150 feet.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Was unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe. Airspeed deviations >±20 KIAS and altitude deviations >±150 feet.
18	**a. Simulated Engine Failure: (P)**	Familiar and complied with procedures outlined in the flight manual, checklist and AFTTP 3-3.H-1. Recognized the emergency, determined the appropriate corrective action, and performed or simulated (as required) from memory all immediate action procedures described in the aircraft checklist.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe. Unable to analyze engine and rotor responses. Unaware of or unresponsive to

		a. At Altitude. Selected a suitable landing area. Correctly terminated maneuver as directed by the IP. **b. At a Hover.** Entered from a 4 feet (±1 foot) hover. Maintained aircraft heading ±10 degrees, while descending at a steady rate without stair stepping. Maintained position over the ground within 1 foot. Executed a smooth, controlled descent and touchdown with little to no lateral or rearward drift.		factors affecting the aircraft.
	b. Simulated Engine Failure: (FE)	Familiar and complied with procedures outlined in the flight manual, checklist and AFTTP 3-3.H-1. Communicated aircraft performance quickly and effectively. All advisory calls made to the pilot flying were consistent and clear, and FE was able to explain corrective actions.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Failed to make appropriate advisory calls to the crew. Unable to analyze engine and rotor responses. Unaware of or unresponsive to factors affecting the aircraft.
19	**a. Hydraulics-Off Approach: (P)**	Familiar and complied with procedures outlined in the flight manual, checklist and	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective

		AFTTP 3-3.H-1. Maintained a minimum entry altitude of 300 feet ±50 feet. Maintained a minimum entry airspeed of 70 KIAS ±10 KIAS. Maintained heading control ±10 degrees and alignment with landing direction. Maintained ground track aligned with the landing area. Maintained a constant shallow approach angle. Executed a smooth, controlled touchdown at or above ETL, but no faster than 30 KIAS, with landing area alignment ±5 degrees. **Note:** ***May be evaluated to a touchdown as outlined above, or to a planned 50 feet go-around. A third option is a steep approach to a no-hover touchdown in which case steep approach parameters apply.***	maneuver effectiveness.	maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe. Unaware of or unresponsive to factors affecting the aircraft.
	b. Hydraulics-Off Approach: (FE)	Familiar and complied with procedures outlined in the flight manual, checklist and AFTTP 3-3.H-1. Communicated aircraft alignment and performance to pilot flying in an accurate	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established

		and timely manner. Able to explain corrective actions.		procedures. Failed to make appropriate calls to preclude unsafe aircraft positioning or touchdown dangerously fast/slow. Unaware of or unresponsive to factors affecting the aircraft.
20	**Autorotation: (P)**	Familiar and complied with procedures outlined in the flight manual, checklist, AFI 11-2TH-1H, Volume 3, and AFTTP 3-3.H-1. Performed smooth, precise, and controlled aircraft movements. Controlled rotor speed (Nr) throughout the maneuver (91-105 percent) and maintained safe airspeed (70 KIAS minimum prior to the flare). Maintained aircraft in trim. If a power recovery during descent was required, initiated in a timely and effective manner without exceeding aircraft limitations. Obtained steady state parameters prior to the flare and flared at an appropriate altitude (between approximately 100 and 75 feet AGL). **a. Straight-Ahead**	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic or unsafe.

		Autorotation. Entered no lower than 500 feet AGL. **b. Turning Autorotation.** Entered no lower than 800 feet AGL. **c. Low-Level Autorotation.** Entered no lower than 50 feet above highest obstacle (AHO). **d. Hovering Autorotation.** Entered from 4 feet (±1 foot) hover. Aligned aircraft within 15 degrees of the wind prior to entry. After entry, maintained aircraft heading ±10 degrees, while descending at a steady rate without stair stepping. Maintained position over the ground within 1 foot. Executed a smooth, controlled descent and touchdown with little to no lateral or rearward drift. **e. Power Recovery.** Affected a smooth and controlled power recovery and would have landed safely and in the desired area. Power recovery completed at no lower than 4 feet at 0 to 15 knots groundspeed. Maintained heading alignment within ±10		

		degrees during power application. **f. Touchdown.** Applied initial pitch at approximately 15 feet AGL. Touched down between 5 and 25 knots groundspeed with no lateral drift. Maintained heading alignment within ±10 degrees during touchdown and slide.		
	Autorotation: (FE)	Familiar and complied with procedures outlined in the flight manual, checklist, AFI 11-2TH-1H, Volume 3, and AFTTP 3-3.H-1. Communicated aircraft performance quickly and effectively. All advisory calls made to the pilot flying were consistent and clear, and FE was able to explain corrective actions. FEs must be evaluated: a Straight Ahead Autorotation, a Turning Autorotation, or both.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Failed to make appropriate advisory calls to the crew. Unable to analyze engine and rotor responses.
21	**Emergency Governor Operations (Optional): (P)**	Familiar and complied with procedures outlined in the flight manual, checklist and AFTTP 3-3.H-1. Maintained Nf at 97% +/- 3% while maintaining Nr in the green (91-105%). Smoothly coordinated the throttle and	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic

		collective. Maintained altitude ±1 foot.		and (or) unsafe.
	Emergency Governor Operations (Optional): (FE)	Familiar and complied with procedures outlined in the flight manual, checklist, and other directives. Communicated aircraft performance in an accurate and timely manner. Able to explain corrective actions.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions precluded safe and effective maneuver accomplishment. Missed multiple advisory calls indicating deviations of **(Q)** standards. Unfamiliar with or did not comply with established procedures. Unaware of or unresponsive to factors affecting the aircraft.
Section III: Instruments (P) **General instrument deviation criteria for this section (applies to all instrument flight)**				
Event		**Q**	**Q-**	**U**
Airspeed		< ±10 KIAS	< ±20 KIAS	> ±20 KIAS
Altitude		< ±100 feet	< ±300 feet	> ±300 feet
Heading		< ±10 degrees	< ±15 degrees	> ±15 degrees
Maintaining Arc		< ±1 nm	< ±2 nm	> ±2 nm
22	**Instrument Cockpit Check**	Familiar and complied with procedures outlined in the flight manual, checklists, and other directives. Ensured required publications were on board.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Was unfamiliar with or did not comply with established procedures.
23	**Instrument Departure, Climb, or Level Off**	Familiar and complied with procedures outlined in the flight manual, checklists, and other directives.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver

		Performed smooth, precise, and controlled aircraft movements. Performed a departure as published or directed and complied with all restrictions. Maintained takeoff power—4-foot hover power +10-15 percent. Maintained accelerative attitude of 5 degrees nose low ±2 degrees. Maintained constant heading ±10 degrees. Aircraft was in trim above 40 KIAS. Maintained a positive rate of climb. Leveled off smoothly at a specified altitude. Promptly established proper cruise airspeed.	effectiveness.	accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.
	Use of NAVAIDs and Navigation	Familiar and complied with procedures outlined in flight manual, checklists, and other directives. Ensured navigation aids (NAVAID) were properly tuned, identified, and monitored. Used appropriate navigation procedures and demonstrated the capability to navigate accurately. Complied with clearance instructions. Aware of position at all times. Fix to fix within 1	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness. Fix to fix within 2 nm.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe. Errors in procedures or use of navigation equipment. Could not establish position. Deviations would have violated airspace or resulted in an

		nautical mile (nm).		unsafe maneuver.
25	**Holding Procedures:**	Complied with procedures outlined in the flight manual, checklists, and other directives. Able to correctly enter and maintain a holding pattern. Able to estimate winds and make appropriate corrections. Able to make timing corrections for very high frequency omnidirectional range station, or nondirectional beacon (NDB) holding. Performed smooth, precise, and controlled aircraft movements. Complied with ATC instructions.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established holding procedures or directives. Incorrect entry procedures. Unable to make appropriate timing or wind corrections. Aircraft control was erratic and (or) unsafe. Deviation would have violated airspace or resulted in an unsafe maneuver.
26	**Precision Approach**	Familiar and complied with procedures outlined in the flight manual, checklists, and other directives. Able to fly a precision approach as published/directed. Complied with all restrictions. Made smooth and timely corrections. Position would have permitted a safe landing. Either instrument landing system (ILS) or precision approach radar (PAR) may be accomplished. For ILS, maintained on	Minor deviations detracted from the approach. Position at decision height would have permitted a safe landing. For ILS, course deviation was +2 dots; glide slope was 1 3/4 dots below to 2 3/4 dots above. For PAR, slow response to controller's instructions caused poor glidepath control, but never exceeded well above or below glidepath. Heading was $\pm$ 10 degrees of controller	Exceeded Q- limits. Major deviations and/or erratic corrections. Did not respond to controller instructions, resulting, in erratic glidepath and heading control in a timely manner. Extended flight below decision height and/or position would not have permitted a safe landing.

		course and glidepath with no more than momentary deviations one dot left or right of course centerline and (or) one dot below to two dots above glidepath and not more than momentary descent below decision height. For PAR, followed controller instructions (heading was + 5 degrees). Had no more than a momentary descent below decision height.	instruction.	
27	**Nonprecision Approach**	Familiar and complied with procedures outlined in flight manual, checklists, and other directives. Able to fly a nonprecision approach as published or directed. Complied with all restrictions. Made smooth and timely corrections. Used appropriate descent rate to arrive at MDA (+100 to - 50 feet) at or before FAF. **Note:** The -50-foot tolerance at MDA applies only to momentary excursions. Had no more than a momentary descent below minimum descent altitude (MDA). Course deviation within $\pm$1 dot. For NDB	Executed approach with minor deviations (within $\pm$2 dots, NDB approach $\pm$15 degrees). Arrived at MDA at or before the MAP, but deviation was greater than (Q) criteria. Position would have permitted a safe landing. For ASR approach, did not exceed "well left/right of course" and complied with controller instructions in a timely manner. **Note:** The -50-foot tolerance at MDA applies only to momentary excursions.	Exceeded Q- limits. Did not comply with procedures or restrictions. Extended flight below MDA. Not in a position for a safe landing. For ASR, did not respond to controller instruction. For GPS, failed to check valid RAIM prior to FAF.

		approach ±10 degrees. For ASR, made smooth and timely response to controller instructions and heading was ±5 degrees of controller instructions. For GPS, check valid RAIM prior to FAF. Position would have permitted a safe landing.		
28	**Transition to Landing (Optional):**	Complied with instructions and restrictions. Was able to safely land the aircraft at the termination of an instrument approach in the desired landing area as briefed.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.
29	**Missed Approach or Climbout**	Complied with procedures outlined in flight manual, checklists, and other applicable directives. Adjusted airspeed to briefed climbout airspeed. Executed missed approach or climbout as published or directed.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with established procedures. Aircraft control was erratic and (or) unsafe.
30	**Unusual Attitude Procedures (Optional)**	Was familiar with and complied with procedures outlined in the flight manual, checklists, and other directives. Was able to recover from an unusual attitude using	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Major deviations from **(Q)** criteria. Errors or omissions prevented safe and effective maneuver accomplishment. Unfamiliar with or did not comply with

		appropriate procedures		established procedures. Aircraft control was erratic and (or) unsafe.
Section IV: Instructor				
***31**	**Ability To Instruct (Critical) (P/FE)**	Reviewed student's present level of training and defined mission events to be performed. Developed a sound plan for accomplishing necessary tasks. Provided a well-organized, thorough student briefing. Planned ahead and made timely decisions. Demonstrated the ability to communicate effectively and offered instruction or suggestions for improvement.		Failed to assess student's present level of training. Briefings were marginal or nonexistent. Did not plan ahead or anticipate student problems. Was unable to communicate effectively with the student or did not provide corrective actions where necessary
32	**Demonstration of Maneuvers (P/FE)**	Able to effectively demonstrate procedures and maneuvers. Demonstrated a thorough knowledge of aircraft systems, procedures, and all applicable publications and directives.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Did not demonstrate correct procedures. Had an insufficient depth of knowledge about aircraft systems, procedures, and (or) applicable publications or directives.
33	**Performance Analysis and Critique (P/FE)**	Accurately assessed student performance. Was able to discern problem areas. Correctly identified performance	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations, or maneuver effectiveness.	Performed an inaccurate assessment of student performance. Failed to discern or misdiagnosed several

		deficiencies or strengths. Was able to provide performance feedback at appropriate times. Was able to reconstruct the flight, offer analysis, and provide corrective guidance where appropriate. Completed all training documents thoroughly and accurately.		problem areas. Overlooked or omitted major discrepancies. Provided performance feedback at inopportune times or not at all. Unable to reconstruct the flight, offer analysis, and (or) provide corrective guidance. Failed to complete training documents. Comments in training documents were insufficient to determine student's status and did not reflect actual performance of student.
Section V: Mission (as applicable)				
34	**Visual Flight Rules (VFR) Navigation: (P/FE)**	Familiar with and effectively used available aircraft navigational systems. Able to satisfactorily determine position when map reading. Correctly analyzed all airspace along route and planned accordingly. Recognized checkpoints and turn points. Consistently remained on planned course ±1 mile. Adjusted for deviations in time and course. Updated estimated times of arrival as needed at each major way point.	Able to regain position orientation in a minimal amount of time. Adapted to missed checkpoints and turn points.	Unfamiliar with or did not execute maneuvers according to the flight manual, AFI 11-2TH-1H, Volume 3 or AFTTP 3-3.H-1. Unfamiliar with and unable to effectively use available aircraft navigational systems. Unable to satisfactorily determine position when map reading. Did not recognize checkpoints or turn points. Consistently deviated from planned course. Unable to adjust for deviations in time and course.

		Complied with AFI 11-2TH-1H, Volume 3 and AFTTP 3-3.H-1, planning guidance—used proper symbols, appropriately posted route for flight tracking, etc. Effectively managed all resources (time, fuel, etc.) applicable to mission execution. **a. Dead Reckoning.** Able to use the principles of time, distance, and heading to determine aircraft position, navigation, and destination. **b. Contour Navigation.** Remained within route or area boundaries. Effectively used terrain to determine route, altitude, groundspeed, and aircraft masking. **c. Low-Level Navigation.** Able to use the principles of time, distance, and heading to determine aircraft position, navigation, and destination. Remained within route or area boundaries. Effectively used terrain for masking if available.		

35	**Low-Level Operations: (P)**	Familiar with procedures and able to execute appropriate maneuvers according to the flight manual, AFI 11-2TH-1H, Volume 3 and AFTTP 3-3.H-1. Performed smooth, precise, and controlled aircraft movements during approach, hovering, and takeoff. Thoroughly aware of power requirements and limitations. Gave proper consideration and made use of terrain features and wind conditions. If not flying, closely monitored aircraft systems, instruments, and aircraft flight path and position. **a. En Route.** Chose and flew an effective route, altitude, and checkpoints and turn points. Flew above the minimum altitude and in an established low-level area. **b. Terminal Operations.** Arrived at target within $\pm$2 minutes. Developed an appropriate plan. Was able to adapt to unforeseen circumstances or contingencies.	Minor deviations from Q criteria. Arrived at the target within +/-5 minutes. Did not compromise safety, aircraft limitations, or maneuver/mission effectiveness.	Major deviations from Q criteria. Aircraft control was erratic or unsafe. Failed to confirm or compute TOLD.
	Low-Level Operations:	Familiar with procedures and able to execute appropriate	Minor deviations from Q criteria. Minor errors with	Major deviations from Q criteria. Failed to provide clear, concise,

	(FE)	maneuvers according to the flight manual, AFI 11-2TH-1H, Volume 3 and AFTTP 3-3.H-1. Provided clear, concise and positive direction to the pilot flying during approaches, landings, and departures. Confirms TOLD and is thoroughly aware of power requirements/limitations. Communicated aircraft clearance from obstacles with an acceptable level of speed and accuracy.	communicating aircraft clearance from obstacles with an acceptable level of speed and accuracy. Minor lapses in situational awareness of power requirements/limitations. Did not compromise safety, aircraft limitations, or maneuver/mission effectiveness.	and positive direction during approaches and departures that affected safe and effective mission accomplishment. Failed to confirm or compute TOLD or is unaware of power requirements/limitations.
36	**Formation (P)**	Familiar with and complied with formation procedures, AFI 11-2TH-1H, Volume 3 and AFTTP 3-3.H-1. Established appropriate formations. Positive control of flight or element. Smooth on the controls and had proper wingman considerations. Planned ahead and made timely decisions. **a. En Route.** Maintained position with only momentary deviations. Made smooth and immediate position corrections. Used radio and visual signals properly. Did not attempt a	Somewhat unfamiliar with procedures or directives. Occasionally rough on the controls. Made it difficult for the wingman to maintain position. Did not always plan ahead and (or) was hesitant in making decisions. Performed some deviations in procedures. Minor deviations in lost visual procedures and was slow to rejoin. Was slow to provide lost visual or rejoin instructions. Instructions were vague or unclear. Varied position considerably. Overcontrolled.	Unfamiliar with procedures or directives. Did not establish appropriate formations. Rough on the controls. Little consideration for wingman. Did not plan ahead or was indecisive. Major deviations in procedures. Did not provide adequate lost visual or rejoin instructions. Instructions or executions were incorrect. Unable to maintain a formation position. Made abrupt position corrections. Did not maintain safe separation.

		maneuver that was not briefed. As lead, demonstrated wingman consideration. **b. Lost Visual Procedures (Instrument Meteorological Conditions and Visual Meteorological Conditions).** Provided concise lost visual and rejoin instructions. Correctly executed applicable actions. **c. Rejoin.** Able to make a smooth, timely join-up without excessive closure rate to the appropriate briefed position. Correctly used visual or radio commands to rejoin. As lead, used no more than 15 degrees angle of bank (±5 degrees). As lead, maintained briefed airspeed (normally 80 KIAS ±5). Maintained safe separation. **d. Terminal Operations.** Maintained position with only momentary deviations. Made smooth and immediate position corrections. Maintained safe separation. Maintained required		

		minimum separation during taxi. As lead, correctly maneuvered the flight into position for takeoff, established briefed power setting, and smoothly and correctly established climb . As wingman, maintained position.		
	Formation (FE)	Was familiar with and ensured crew compliance with formation procedures and AFI 11-2UH/TH-1H, Volume 3 and AFTTP 3-3.H-1. Knowledgeable about formation types and spacing required. Kept crew informed of wingman position throughout flight	Was somewhat unfamiliar with procedures or directives. Allowed some deviations in procedures. Was slow to provide wingman positional calls to crew. Had minor unannounced losses of wingman without crew notification.	Was unfamiliar with procedures or directives. Unable to identify appropriate formations. Made major deviations in procedures. Did not provide wingman positional calls to crew. Did not ensure safe formation separation.
37	**Remote Operations (P)**	Familiar with procedures and able to execute appropriate maneuvers according to the flight manual and AFTTP 3-3.H-1. Performed smooth, precise, and controlled aircraft movements during approach, hovering, and takeoff. Thoroughly aware of power requirements and limitations. (TOLD was recomputed if necessary for gross weight or environmental changes.) Gave proper	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations or maneuver/mission effectiveness. Missed minor factors pertinent to the approach, landing, or departure. Site evaluation not tailored to the situation or was excessively detailed and time consuming. Confused or disorganized communication with crew**.**	Not familiar or did not comply with procedures. Failed to consider significant details pertinent to the approach, landing, departure, or search procedure. Unable to clearly communicate with crew. Aircraft control was erratic or unsafe. Failed to verify TOLD was computed, and (or) an adequate power margin existed for the flight conditions.

		consideration and made use of terrain features and wind conditions. If not flying, closely monitored aircraft systems, instruments, and aircraft flight path and position. Ensured aircraft clearance from obstacles. **a. Site Evaluation.** Effectively assessed landing risk. Evaluated and communicated the landing area's obstacles, size and topography, associated winds and turbulence, aircraft's power available/required, and departure route. Maintained no lower than 300' above the landing site and no lower than 100' above highest obstacle (AHO) and a minimum of 50 KIAS during the high reconnaissance. Maintained a minimum of 50' above highest obstacle (AHO) and 50 knots during the low reconnaissance. **b. Approach and Landing.** Performed a landing according to procedures outlined in the flight manual and AFTTP 3-3.H-1.		

		Performed smooth, precise, and controlled aircraft movements. Maintained a constant ground track and approach angle. Descent and deceleration were constant and even. Maintained a constant heading during touchdown. Maintained less than an 800-feet-per-minute rate of descent when below 40 KIAS. Cleared all barriers by at least 10 feet. **c. Departure.** Selected and performed takeoff according to procedures outlined in the flight manual and AFTTP 3-3.H-1, and commensurate with terrain, winds, barriers, available power, and takeoff restrictions. Performed smooth, precise, and controlled aircraft movements. Maintained a constant ground track, obstacle clearance (10 feet minimum), and climbout angle. Made a smooth power application and acceleration above translational lift. Aircraft was trimmed after a normal climb		

		was established and cleared barriers. **d. Slope Operations.** Correctly reviewed slope landing limitations described in the flight manual. Did not exceed a 1-foot drift before touchdown and allowed no drift after skid contact with the ground. Heading remained within ±5 degrees.		
	Remote Operations (FE)	Familiar and complied with procedures according to the flight manual and AFTTP 3-3.H-1. Confirmed required TOLD and is thoroughly aware of power requirements and limitations. Provided clear, concise and positive direction to the pilot flying during recon-naissance, approaches, landings, and departures. Communicated aircraft clearance from obstacles with an acceptable level of speed and accuracy.	Minor deviations from **(Q)** criteria. Did not compromise safety, aircraft limitations or maneuver/mission effectiveness. Missed minor factors pertinent to the approach, landing, or departure. Confused or disorganized communication with crew**.**	Not familiar or did not comply with procedures. Unable to clearly communicate with crew. Failed to compute or confirm TOLD or is unaware of power requirements and (or) limitations. Failed to provide clear, concise and positive direction to the pilot flying during reconnaissance, approaches, landings, and departures.
38	**NVG Operations: (P/FE)**	Familiar with NVG procedures and able to execute appropriate maneuvers according to the flight manual, AFI 11-2TH-1H, Volume 3, AFTTP 3-3.H-1 and AFMAN 11-217, Volume 3,	Missed minor factors pertinent to the performance of the NVGs.	Not familiar or did not comply with procedures. Accepted NVGs that endangered crew survival. Errors or omissions showed a total lack of knowledge of NVG

		Supplemental Flight Information. **a. Preflight.** Correctly inventoried, inspected, and prepared all necessary equipment. Used the preflight checklist contained in the appropriate NVG T.O. Completed task before departing for the aircraft. Did not accept substandard equipment. **b. Limitations.** Correctly described the limitations for visual acuity and for operations. **c. Malfunctions.** Familiar with the listed malfunctions according to NVG directives. Recognized malfunctions. Executed proper actions at the occurrence of a malfunction. **d. Employment.** Complied with guidance in AFI 11-2TH-1H, Volume 3, while using NVGs.		limitations.
39	**Navigation Divert (P/FE)**	Correctly determined new heading ±10 degrees. Correctly determined estimated time en route (ETE) (±2 minutes) and distance to diversion point. Determined	Missed minor factors pertinent to heading, distance, timing, fuel, and (or) weight. Had confused or disorganized communication with crew.	Not familiar or did not comply with procedures. Committed to a mission that endangered crew survival. Excessive delay in computations

		ETE from the diversion point to nearest recovery base ±2 minutes. Correctly determined fuel requirement ±100 pounds and loiter time ±5 minutes. Correctly analyzed and determined if mission could be accomplished, to include payload capability at arrival to destination point. Accomplished mission without undue delay. Adapted available resources to changing situations.		resulted in inability to accomplish mission.

BURTON M. FIELD, Lt Gen, USAF
DCS, Operations, Plans and Requirements

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoD Instruction 7730.57, *Aviation Incentive Pays and Continuation Bonus Program*, 12 August 2008

AFPD 11-2, *Aircrew Operations*, 19 January 2012

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure,* 19 January 2012

AFI 11-2TH-1H, Volume 3, TH-1H *Helicopter Operations Procedures*, 2 July 2010

AFI 11-2TH-1H, Volume 3, CL-1, *Crew Briefing Guides and Checklists*, 27 Jun 2008

AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program,* 13 September 2010

AFI 11-202, Volume 3, *General Flight Rules,* 22 October 2010

AFI 11-215, *USAF Flight Manuals Program (FMP)*, 22 December 2008

AFMAN 11-217, Volume 3, *Supplemental Flight Information*, 23 February 2009

AFMAN 33-363, *Management of Records*, 1 March 2008

Air Force Tactics, Techniques and Procedures (AFTTP) 3-3.H-1 *Combat Aircraft Fundamentals H-1,* 4 January 2010

TO 1H-1(T)H-1, *Flight Manual, USAF Series TH-1H Helicopter*, 29 Jun 2012

TO 1H-1(T)H-1 CL-1 *Pilot's Flight Crew Checklist, TH-1H Helicopter,* 29 Jun 2012

Prescribed Form

AF Form 4104, *TH-1H Flight Evaluation Worksheet*

Adopted Forms/IMTs

AF Form 8, *Certificate of Aircrew Qualification*

AF IMT 70, *Pilot's Flight Plan and Flight Log*

AF Form 847, *Recommendation for Change of Publication*

AF IMT 1381, *USAF Certification of Air Crew Training*

AF Form 4348, *USAF Aircrew Certifications*

DD Form 175-1, *Flight Weather Briefing*

Abbreviations and Acronyms

AGL—above ground level

AHO—above highest obstacle

ATC—air traffic control

ATD—Aircrew Training Device

CRM—cockpit/crew resource management

EF—Evaluator Flight Engineer

EPE—emergency procedures evaluation

ETE—estimated time en route

ETL—effective translational lift

FE—flight engineer (Career Enlisted Aviator)

FLIP—flight information publication

ILS—instrument landing system

INIT MSN—initial mission

IOS—Instructor Operating System

IP—instructor pilot

KIAS—knots indicated airspeed

MAJCOM—major command

MDA—minimum descent altitude

MSN—mission

NAVAID—navigational aid

NDB—nondirectional beacon

nm—nautical mile

NVG—night vision goggles

OPR—office of primary responsibility

P—Pilot (all inclusive)

PAR—precision approach radar

psi—pounds per square inch

REQUAL—requalification

rpm—revolutions per minute

Stan/Eval—standardization/evaluation

T.O.—technical order

TOLD—takeoff and landing data

VFR—visual flight rules

Vne—velocity never to exceed

WST—Weapons Systems Trainer

Attachment 2

TH-1H BOLDFACE EMERGENCY PROCEDURES

ENGINE FAILURE

AUTOROTATE

EMER GOV OPNS

ENGINE OVERSPEED

COLLECTIVE – INCREASE

THROTTLE – REDUCE

EMER GOV OPNS

MAIN DRIVESHAFT FAILURE

AUTOROTATE

EMER SHUTDOWN

ENGINE FIRE – START

START SWITCH – PRESS

THROTTLE – OFF

FUEL SWITCHES – OFF

FLIGHT CONTROL SERVO HARDOVER

HYD CONT SWITCH – SELECT OPPOSITE POSITION

LAND AS SOON AS POSSIBLE

COMPLETE LOSS OF TAIL ROTOR THRUST (UNCONTROLLABLE)

AUTOROTATE

THROTTLE – FLIGHT IDLE